



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/642,835	08/14/2003	Yuk Cheung Au	P/4076-58	4066
2352 7590 09/21/2007 OSTROLENK FABER GERB & SOFFEN 1180 AVENUE OF THE AMERICAS NEW YORK, NY 100368403			EXAMINER ALIE, GHASSEM	
			ART UNIT 3724	PAPER NUMBER
			MAIL DATE 09/21/2007	DELIVERY MODE PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/642,835

Applicant(s)

AU ET AL.

Examiner

Ghassem Alie

Art Unit

3724

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 27 June 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-12 and 21 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-12 and 21 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 24 September 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1 and 21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Price et al. (2,657,926), hereinafter Price, in view of Oaks et al. (5,079,980), hereinafter Oaks. Regarding claim 1, Price teaches an apparatus for indexing a length of film 17 for severance. Price also teaches that the apparatus includes a linear feeding device 20 operative to hold the film 17 and to feed a predetermined amount of film 17 to a trimming device 52 by moving linearly between an initial position and another position towards the trimming device 52. Price also teaches that the film support is a film holder 70 that is operable between a first position, wherein a gap is provided for the film 70 to pass through during the feeding to the trimming device 52, and a second position. Price also teaches that the film holder 70 is operable to a second position for clamping the film 17 along the length of a line extending transversely of the film 17 feed direction and along which the trimming device 52 serves the film. It should be noted that the film 17 is clamped between the holding film 17 and the film support positioned opposite of the film holder 70. It should also be noted that the film holder 70 extends transversely along the length of a transverse line. The film holding 70 clamps the film 17 along a transverse line and along which the trimming device trims the film. It should be noted that the transverse line on which the film holder 70 clamps the film is also located along the trimming device. This is also true in Oaks. In other words, the film is clamped by

the film holder 70 along a transverse line that is also located along the trimming device. See Figs. 1-3 and col. 3, lines 14-73 in Price. Price does not teach explicitly that the film holder 70 is located between the linear feeding device and the trimming device on the in-feed side of the trimming device. However, Oakes teaches the holding device is located between the feeding device and the trimming device on the in-feed side of the trimming device. See Figs. 7 and 8 and col. 5, lines 56-68 and col. 6, lines 1-62 in Oakes. It should be noted that Price's apparatus functions the same whether the film holder is positioned between the linear feed device and the trimming device upstream of the trimming device of the apparatus or the film holder located on the downstream of the trimming device of the apparatus, since in both locations the film holder functions the same and clamps the film when the film is severed by the trimming device. It would have been obvious to a person of ordinary skill in the art to switch the location of the film holder and the trimming device in Price's cutting apparatus, in the manner as taught by Oakes, since the film holder functions the same whether it is located downstream of the trimming device or upstream of the trimming device. In addition, it would have been obvious to one having ordinary skill in the art at the time the invention was made to switch the location of the trimming device and the film holder in Price's apparatus, since it has been held that rearranging parts of an invention involves only routine skill in the art. *In re Japikse*, 86 USPQ 70.

Regarding claim 21, Price teaches everything noted above including that an edge of the film holder 70 is substantially aligned with the trimming device 52 at a position where the trimming device serves the film 17. It should be noted that the lateral edge of the film holder is aligned with the trimming device during the trimming.

Art Unit: 3724

3. Claim 2 is rejected under 35 U.S.C. 103(a) as being unpatentable over Price in view of Oakes, as applied to claim 1, and in further view of Friberg et al. (3,813,974), hereinafter Friberg. Regarding claim 2, Price, as modified above, teaches everything noted above except that the linear feeder has a vacuum head coupled to a vacuum suction device. However, the use of vacuum head for displacing or moving a product is well known in the art such as taught by Friberg. Friberg teaches a vacuum head 8 for feeding a material 1 forward towards a cutter 12. See Fig. 1-4 and col. 2, lines 31-69 in Friberg. It would have been obvious to a person of ordinary skill in the art to replace the gripping head in Price's cutting apparatus, as modified by above, with the vacuum head as taught by Friberg, since Friberg's gripping head as an alternative for gripping material and moving the material forward functions the same as Price's gripping head.

It is to be noted that the patent to Bruck (4,716,069) was inadvertently omitted a rejection heading between paragraph 3 and the paragraph below paragraph 3 in the first Office action mailed on 03/27/07. It would have been clearly evident to one of ordinary skill in the art upon reading the body of the rejection that the application of Bruck was fully intended and, therefore, does not constitute a new ground of rejection. Bruck has now been incorporated into the heading of the rejection as originally and obviously intended.

4. Claims 3-4 are rejected under 35 U.S.C. 103(a) as being unpatentable over Price in view of Oakes and Friberg, as applied to claim 2, and in further view of Bruck (4,716,069). Regarding claim 3, Price, as modified above, teaches everything noted above except that the head is changeable for different types of film. However, the use of different support surface for contacting film material or the like is well known in the art such as taught by Bruck

(4,716,069). Bruck teaches that a contacting surface for the roller 8 which includes a suitable non-stick surface such as polytetrafluoroethylene. Bruck also teaches that support surface of the roller 9 is covered with cork or hard rubber. The roller 8 contacts high-density polyethylene film material 2 and the roller 9 contacts a low-density polyethylene film material. Therefore, different support surfaces are used for different types of film. The vacuum head in Friberg is removable and could be replaced. Therefore, a new vacuum head or vacuum head with different support surface could be used for a different type of film, since Bruck teaches that different support surfaces could be used with different types of film. Therefore, it would have been obvious to a person of ordinary skill in the art to provide Price's cutting apparatus, as modified above, with a different support surface or a different vacuum head having a specific support surface for contacting a specific type of film, as taught by Bruck, in order to ensure that the feeding device has a suitable support surface for the specific type of film engage with the feeding device.

Regarding claim 4, Price, as modified above does not explicitly teach that the surface of the linear feeding device that contacting the film is made from material that has low static generation with the film. As stated, above Bruck teaches a contacting surface for the roller 8 which includes a suitable non-stick surface such as polytetrafluoroethylene. Bruck also teaches that support surface of the roller 9 is covered with cork or hard rubber. See Figs. 1-2 and col. 4, lines 29-52 in Bruck. Therefore, it would have been obvious to a person of ordinary skill in the art to provide Price's cutting apparatus, as modified above, with a low static material support surface for the feeding device, as taught by Bruck, in order to ensure

that the film does not stick to the linear feeding device and facilitate the operation of the linear feeding device.

5. Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over Price in view of Oakes, as applied to claim 1, and in further view of Igarashi (2002/0039119). Regarding claim 5, Price, as modified by above, teaches everything noted above except a linear encoder coupled to the linear feeding device for determining the position of the linear feeding device. However, the use of encoder with a carriage for a feeder is well known in the art such as taught by Igarashi. Igarashi teaches a linear encoder 9 coupled to a linear carriage 3 for determining the position of the carriage. See Fig. 1 and page 1, paragraphs 3-6 in Igarashi. It would have been obvious to a person of ordinary skill in the art to provide the feeding device in Price's cutting apparatus, as modified by above, with the linear encoder, as taught by Igarashi, in order to determined the position of the feeding device.

6. Claims 6 and 7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Price in view of Oakes, as applied to claim 1, and in further view of Rosenthal (2,214,478) and Ando et al. (2002/0057912), hereinafter Ando. Regarding claim 6, Price, as modified by Oakes, teaches everything noted above including a film reel 102 for supplying the length of film. Price, as modified by Oakes, does not teach sensors positioned adjacent to the film reel operative to activate the film reel to release film at particular position of the film with respect to the sensors, whereby a loop is maintainable between the film reel and the surface supporting the film for indexing. However, Rosenthal teaches a film reel 4 for supplying film and a loop, which is maintained between the film reel and a surface for supporting the film. See Figs. 1-4 and col. 1, lines 45-55 and col. 2, lines 1-14 in Rosenthal. It would have been

obvious to a person of ordinary skill in the art to provide the film in Price's cutting device, as modified by above, with the loop as taught by Rosenthal in order to eliminate the need of supplying power for pulling the film from the reel by the feeding mechanism. Price in view of Oakes and Rosenthal does not teach that the sensors maintain the loop on the film.

However, the use of sensors to maintain the loop on the film is well known in the art such as taught by Ando. Ando teaches loop sensor 112 for sensing the loop portion 108 of the film. See Figs. 3-6 and page 10, paragraphs 108-111 in Ando. It would have been obvious to a person of ordinary skill in the art to provide Price's cutting device, as modified above, with one or more loop sensors as taught by Ando in order to maintain the loop on the film.

Regarding claim 7, Price, as modified by above, teaches everything noted above including one or more rollers 7 situated between the film reel 4 and the linear feeding device to bring the film substantially level with the surface supporting the film. See Fig. 1 in Rosenthal.

7. Claim 8 is rejected under 35 U.S.C. 103(a) as being unpatentable over Price in view of Oakes, as applied to claim 1, and in further view of Von Hofe et al. (3,756,899), hereinafter Hofe. Regarding claim 8, Price teaches everything noted above except a collecting reel to which a baking cover peeled off from the film is coupled, for collecting backing cover peeled off from the film during indexing. However, the use of collecting reel for collecting a baking cover of a film or the like is well known in the art such as taught by Hofe. Hofe teaches a collecting reel 66 for collecting the backing cover of the film L. See Fig. 2B and col. 5, lines 24-62 in Hofe. It would have been obvious to a person of ordinary

skill in the art provide Price's cutting device, as modified by above, with the collecting reel as taught by Hofe in order to collect the backing cover of the film.

8. Claim 9 is rejected under 35 U.S.C. 103(a) as being unpatentable over Price in view of Oakes, and Hofe, as applied to claim 8, and in further view of Moisio (6,297,882). Regarding claim 9, Price, as modified by above, does not teach sensors adjacent the backing cover that are operative to sense a distance from the backing cover to the collecting sensors and initiate driving of the collecting reel for collecting backing cover from the film at a predetermined distance of the backing cover to the collecting sensors. However, the use of sensor located at fixed at a predetermined distances from a roll of film or web to initiate driving the roll of film and paper is well known in the art such as taught by Moisio. Moisio teaches sensors 4, 4', 4'' adjacent a backing cover 2 that are operative to sense a distance from the backing cover to the collecting sensors and initiate driving of the collecting reel for collecting backing cover from the film at a predetermined distance of the backing cover to the collecting sensors. See Figs. 1-4 and col. 3, lines 5-65 in Mosios. It would have been obvious to a person of ordinary skill in the art to provide Price's cutting device, as modified above, with the sensors as taught by Moisio In order to measure the size of the roll of collecting reel and determined when it has to be replaced.

9. Claim 10 is rejected under 35 U.S.C. 103(a) as being unpatentable over Price in view of Oakes, as applied to claim 1, and in further view of Nam et al. (2002/0109217), hereinafter Nam. Regarding claim 10, Price, as modified above, teaches everything noted above except a pick up device movable between the trimming device and a placement position and an optical device positioned under the pick-up device for inspecting a piece of

Art Unit: 3724

film on the pick-up device. Nam teaches a pick up device 52 movable between the trimming device 48 and a placement position 66. Se Fig. 4 in Nam. It would have been obvious to a person of ordinary skill in the art provide Price's cutting device, as modified above, with the picking device as taught by Nam in order to pick up the to apply the film on the workpiece.

Price, as modified above, does not teach an optical device to inspect a piece of film.

However, Official notice is taken that the use of optical devices for inspection of the cut pieces are well known in the art such as is evident in Thomson et al. (5,046,389).

10. Claim 11 is rejected under 35 U.S.C. 103(a) as being unpatentable over Price in view Oakes, as applied to claim 1, and in further view of Dueck (6,647,872). Regarding claims 11 and 12, Price, as modified above, teaches everything noted above except a sensor to detecting a presence of a length of film. However, the used of sensors to detect end-of-film or workpiece and the use a sensor for detecting a presence of a length of film or workpiece are well known in the art such as taught by Dueck. Dueck teaches a sensor for detecting the presence of workpiece. See Col. 2, lines10-20 in Dueck. It would have been obvious to a person of ordinary skill in the art provide Price's cutting device, as modified above, with the sensor as taught by Dueck in order to detect the presence of the film.

11. Claim 12 is rejected under 35 U.S.C. 103(a) as being unpatentable over AAPA in view of Price and Oakes, as modified in claim 1, and in further view of Yamaguchi et al. (5,239,904), hereinafter Yamaguchi. Price, as modified above, teaches everything noted above except a sensor for detecting end-of-film on and initiating an action to stop feeding film to the trimming device. However, the used of sensors to detect end-of-film or workpiece and the use a sensor for detecting a presence of a length of film or workpiece are well known

in the art such as taught by Yamaguchi. Yamaguchi teaches a sensor E for detecting end-of-film on and initiating an action to stop feeding film to the trimming device. See col. 12, lines 1-25 in Yamaguchi. It would have been obvious to a person of ordinary skill in the art provide Price's cutting device, as modified above, with the sensor as taught by Yamaguchi in order to detect the leading end of the film.

Response to Amendment

12. Applicant's arguments filed on 06/27/07 have been fully considered but they are not persuasive.

Applicant's argument that neither Price nor Oakes teaches or suggests that the film is clamped "along the length of a transverse line on which it is being cut" is not persuasive. Firstly claim 1 merely recites, "the film is clamped by the film holder, along the length of the line extending transversely of the film feed direction and along which the film is severed by the trimming device." See lines 11-13 in claim 1. It should be noted that the clamp holder or finger 70 clamps the film on a line that has the same length as the width of the clamp holder 70. The line located distanced from the cutting edge of the blade or line 2. See Figs. 1-2 below. The cutting edge 55 of the trimming device cuts the film 17 along the length of a line 2, which extends transversely of the film feed direction. Line 2 is parallel to the line that the film holder clamps the film 17. It should be noted that the line at which the film holder clamps the film is located along the length of the line 2.

In an alternative interpretation of claim 1, line 2 could represent the line on which the film is clamped by the film holder and extending transversely of the film feed direction. It should be noted that the film is clamped along the length of the line 2. The film holder

clamps the blade at line 2 which is located along the line that film is severed by the trimming device. It should be noted that “along which the film is severed by the trimming device” is being read as independent from “along the length of a line extending transversely of the film feed direction” so that the location of severance need not be on the same location as where the film is clamped. Therefore, the film is clamped along the length of the line extending transversely of the film feed direction and along the line that the film is cut.

Applicant's argument that the finger 70 is spaced apart from the knife 52 and does not clamp the film 17 at the cutting line is not persuasive. Firstly, claim 1 and other claims in the instant application do not call for the film to be clamped at the cutting line. Secondly, claim 1 calls for the film to be clamped along the line that the film is cut. As stated above, the film holder 70 camps the film 17 at the line that extends along or parallel to the line that the film is cut by the knife 52. See Figs. 1-2 below.

Applicant's argument that the finger or film holder 70 only supports the film at a single point is not persuasive. As shown in Figs. 1-2, film holder 70 has a width portion extending transversely in the feed direction of the film. The width of the film holder is spaced from trimming device 52 but extends along the line that the trimming device cuts the film. The width of the film holder could be considered as a large single point, but it has a length width that extends along a line transversely of the film feed direction.

Applicant also asserted that the term finger in Price reference would suggest that the finger 70 does not provide clamping along the length of a transverse line on which the film is cut. This is not true. As stated above, the finger 70 clearly shown to has a width portion that extends along a length of a transverse line which is also extended along the line that the film

is cut. It should be noted that the claims do not explicitly recite the length of the line extending transversely of the film feed direction and the length of the line on which the film is severed by the trimming device. Therefore, minimum extension of the finger 70 along a line extending transversely of the claim limitations set forth in claim 1.

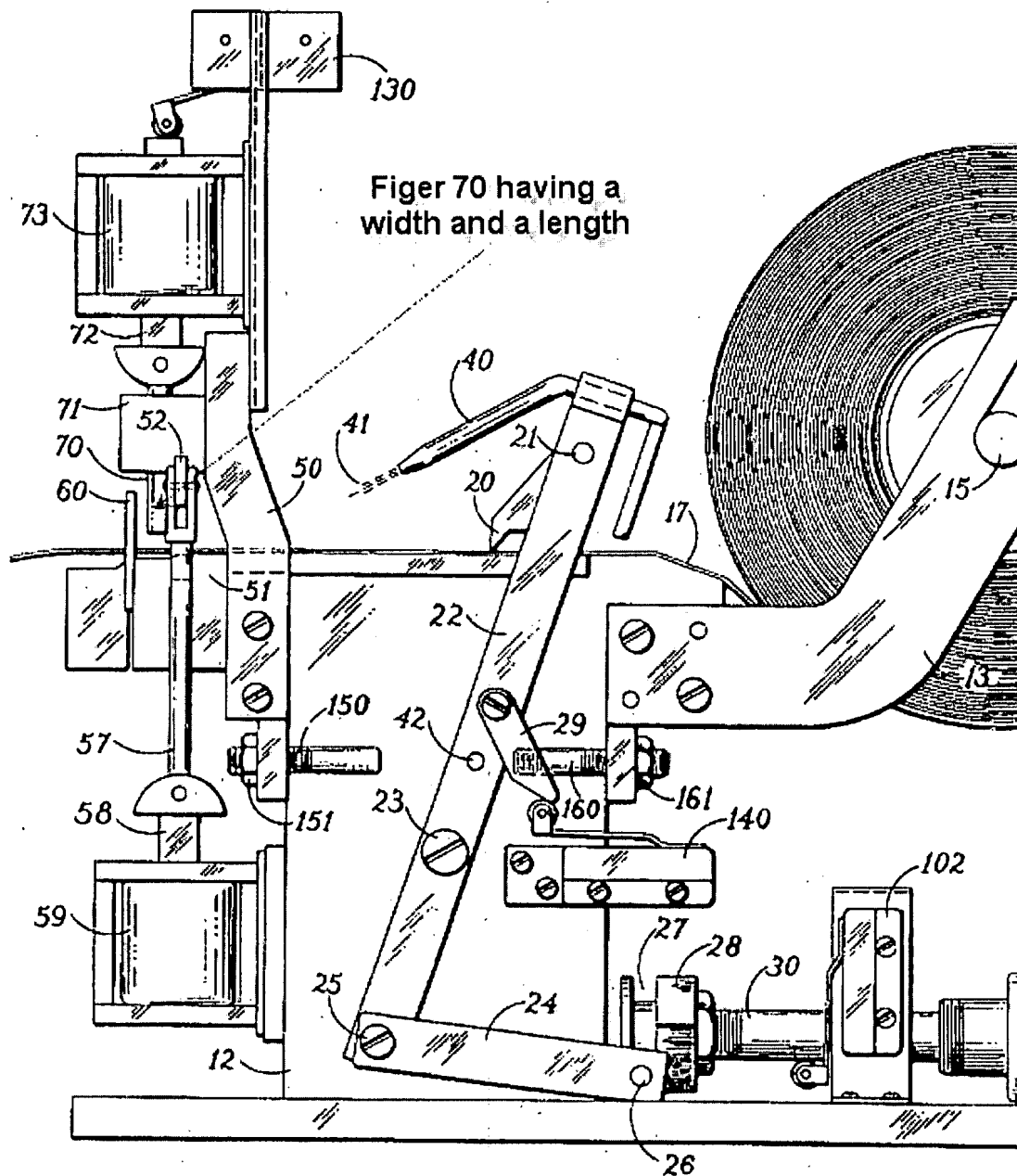
In response to Examiner's assertion that claim 1 does not require that the film holder extend along the length of the film, Applicant' asserted "claim 1 requires that 'the film is clamped by the film holder along a line extending transversely of the film feed direction and along which the film is severed by the trimming device'." However, it is not clear how applicant concluded from these limitations that the line extends along the entire length of the film. It is also not clear how the applicant concluded from the limitations set forth above that "the line along which the film is clamped is also the line along which the film is severed, which runs the length of the film to ensure that the film is severed." See paragraph 4 in page 7 in applicant's remarks. Claim 1 does not indicate that the film is clamped along the same line that is being severed by the trimming device. In fact, it appears that applicant argues the limitations that have not been claimed. Claim 1 does not remotely requires that the film to be clamped along the same line that the film is cut.

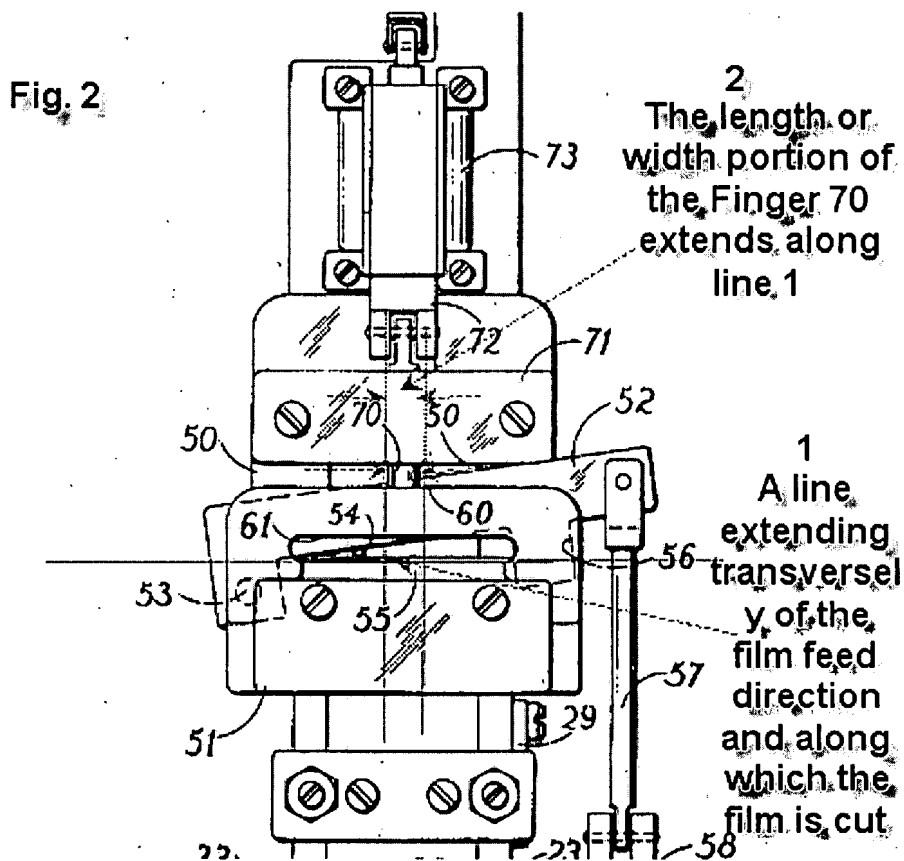
Applicant's argument that Oakes also does not teach that the film is clamped by the bar 130 at the cutting line of the blades 122 and 164 is not persuasive. As stated above, claim 1 does not require that the film to be clamped at the cutting line at which the film is cut by the trimming device. Claim 1 merely recites, "the film is clamped by the film holder, along the length of a line extending transversely of the film feed direction and along which the film is severed by the trimming device." Claim 1 requires that the film to be clamped along the

Art Unit: 3724

line that film is cut by the trimming device. However, claim 1 does not require that the film to be clamped by the film holder at the same line that the film is cut by the trimming device or along the same line that the film is cut by the trimming device.

Fig. 1





Conclusion

13. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the

Art Unit: 3724

advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

14. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ghassem Alie whose telephone number is (571) 272-4501.

The examiner can normally be reached on Mon-Fri 8:30 am - 5:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Boyer Ashley can be reached on (571) 272-4502. The fax phone number for the organization where this application or proceeding is assigned is (571) 273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, SEE <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Ghassem Alie
Patent Examiner
Art Unit 3724



GA/ga

September 17, 2007